

**METHODS AND COMPOSITIONS FOR DETERMINING THE RELATIONSHIP
BETWEEN HYBRIDIZATION SIGNAL OF aCGH PROBES AND TARGET
GENOMIC DNA COPY NUMBER**

ABSTRACT OF THE INVENTION

Methods for evaluating surface-bound polynucleotides are provided. Specifically, the methods involve contacting an array of surface-bound polynucleotides with a population of labeled nucleic acids made from a non-naturally occurring composition of chromosomes, and evaluating binding of the labeled nucleic acids to a surface-bound polynucleotide. The methods may be used, for example, to screen for surface bound polynucleotides that have desirable binding characteristics, e.g., suitability for use in array-based comparative genomic hybridization assays. Kits and computer programming for use in practicing the subject methods are also provided.